NH MEDICAL CONTROL BOARD

Fire Standards and Training and Emergency Medical Services
Concord, NH

MINUTES OF MEETING

November 15, 2007

Members Present:	Tom D'Aprix, MD; Chris Fore, MD; MD; Jim Martin, MD; Douglas McVicar, MD; Norman Yanofsky, MD; Sue Prentiss, Bureau Chief
Members Absent:	Donavon Albertson, MD, Frank Hubbell, DO; Jeff Johnson, MD; Patrick Lanzetta, Joseph Mastromarino, MD; William Siegart, DO; John Sutton, MD
Guests:	Steve Erickson, Jeanne Erickson, Doug Martin, Michael Pepin, Steven Achilles, Jonathan Dubey, David Dubey, Chris Dubey, Janet Houston, Kevin Drew, David Hogan, Kelson Mulcahy, Janet Williamson, Benjamin King, Jim Farley
Bureau Staff:	Rick Mason, Director, Vicki Blanchard, ALS Coordinator, Mike Schnyder, Research and Quality Management Coordinator

I. CALL TO ORDER

Item 1. McVicar welcomed all to the meeting

II. ACCEPTANCE OF MINUTES

Item 1. May 17, 2007 Minutes were distributed via email and reviewed prior to the meeting. Yanofsky moved to approved, D'Aprix 2nd. Approved unanimously without amendments.

Item 2. EMS Community. Nothing at this time

III. DISCUSSION AND ACTION PROJECTS

Item 1. National EMS Scope of Practice Model

Blanchard gave each Board member a copy of the *National EMS Scope of Practice Model*. She explained that within the document was the recommended scope of practice for EMS to be implemented sometime in 2009. Currently the Scope of Practice has been approved and the educational curriculums and programs are under development. She asked the board to specifically review pages 29 - 31, which show recommended skill sets for each provider level. The

protocol subcommittee is looking for guidance whether the board wants the protocols to always follow the new scope of practice.

Prentiss noted that NH is in very good shape already, and will not have to change very much to comply with the new recommendations. Our EMT-Intermediate looks very much like the "Advanced EMT" in the model.
There are a few differences which will need to be addressed and points where decisions will have to be made. For example, currently our EMT-Intermediates have a cardiac module and the new scope does not.

D Martin asked if it was the goal to keep our protocols in line with the model.

Prentiss answered that this guideline is not mandatory, and the board must decide to what extent NH should follow it.

McVicar asked if there were going to be rule changes.

Prentiss replied yes there would need to be changes in curriculum wording and titles. Prentiss asked the members to take note of a printout of a power point presentation included in the folders which outlines changes required to implement the Education Agenda for the Future.

McVicar stated that he felt the document would help us deal with the issue of role creep. For example, at our last meeting we decided not to create protocol for nitroglycerin for Intermediates because of concerns with role creep, even though many thought the protocol was a good idea. Where we follow the model we have a solid footing, immune to free floating skill levels and criticisms about sliding down the slippery slope of role creep.

Yanofsky asked if it was our responsibilty at this time to go ahead and direct the subcommittee to follow the scope. D'Aprix stated that subcommittee needed to look at the document item by item.

Discussion continued and the consensus from the board was to try and align the protocols with the model as much as possible, knowing there might be circumstances where we would go outside the model. The subcommittee will take note of these item by item as they bring protocols forward to the board.

J Martin noted that the subcommittee is already doing this, for example in the Nitrous Oxide protocol.

Item 2: Haloperidol

In September 2007, the FDA publicized labeling changes for haloperidol to strengthen the warnings regarding cardiac conduction and rhythm changes, especially in patients who receive the medication intravenously or in higher than recommended doses. Although haloperidol is not and never was labeled for IV use, the notice was issued because it is routinely used IV off-label.

The board unanimously decided to change the current protocols to reflect this notice, by removing the IV route of administration from haloperidol administration.

McVicar stated that he thought the current notification system (TEMSIS, EMS Notification Bullets and the List Serve) would be adequate for advising the paramedics. This would be a good test of the notification system and we could then a few months later send out a questionnaire asking if they knew about the protocol change and how they learned about it.

While all agreed to changing the protocol, there was discussion as to whether or not the whole protocol document should be changed. It was decided that the protocols posted on the State's EMS website should always be the most current version. Blanchard will update the protocol and have it posted as soon as possible.

The discussion then turned to the more general question of whether protocols should ever include off-label uses of medications. It was agreed that for the sake of liability for the providers, the protocols should not include off-label use of medications, routes or procedures. However the example of midazolam intranasal was raised. This may be an off-label use. The board agreed not make a blanket exclusion, but to consider certain widespread off-label uses that provide a distinct advantage, if they are carefully researched and fully discussed prior to approval.

Item 2. CHF (Pulmonary Edema)

The protocol subcommittee has recommended that the MCB change the CHF (Pulmonary Edema) protocol to include CPAP as a first line Paramedic treatment followed by nitroglycerin – and remove furosemide from the protocol altogether.

This issue, as it was expected to be controversial, was presented as a separate agenda item apart from the other protocol changes in order to assure that it has adequate time for discussion.

D Martin spoke in favor of the protocol change, stating that there should be more focus on nitroglycerin, which reduces preload and facilitates the movement of fluid out of the lungs.

J Martin stated that CHF can be a difficult diagnosis, with many patients having both CHF and pneumonia. Administration of furosemide to a patient with pneumonia might worsen the patient's condition if the patient is dehydrated. Martin proposed that if the board did not want to entirely eliminate furosemide, it should be moved to the end of the protocol, and the emphasis placed on CPAP.

Yanofsky and McVicar both voiced their opinion in which they felt that years of experience have shown furosemide beneficial in pulmonary edema. Yanofsky provided a detailed critique of the literature that was presented to support the elimination of furosemide. In fact the papers that were evidence-based showed that standard doses of furosemide were associated with more successful treatment of pulmonary edema. Papers that were opinion-based criticized the use of furosemide.

Farley commented that he felt the issue was an assessment problem, not a medication problem. Better assessments would reduce the incidence of

furosemide being given to dehydrated patients with pneumonia and no evidence of fluid overload.

After some discussion, McVicar went to the white board and asked the members to dictate their consensus for the CHF (Pulmonary Edema) protocol. He then scribed as follows:

- Basic: Assist with patient prescribed nitroglycerin with SBP > 100 mmHg
- Intermediate: Administer 0.4mg nitroglycerin with SBP > 100 mmHg
- Paramedic:
    - CPAP
    - NTG IV (via Pump) or Paste
    - Furosemide 40 mg IV if SBP > 100 and evidence of fluid overload
    - Morphine 1 – 2 mg for anxiolysis

There was discussion regarding the systolic blood pressure limits. The board decided to make the protocol consistent with the AHA standards, which state that the systolic blood pressure limit for nitroglycerin and furosemide administration is 100 mmHg.

At the conclusion of the CHF (Pulmonary Edema) discussion, approval of the protocol as written above was unanimous.

During this discussion, the issue of CPAP was raised. Schnyder stated that CPAP was a non-invasive skill, very effective, and fairly simple to use. He recommended that it be considered even at the Basic level, although he stated that this is probably not common in other states. NH would be leading the way if we decide to put CPAP at the basic level.

The National Scope of Practice was referenced and CPAP was found only at the Paramedic level. Schnyder asked that the board at least consider it at the Intermediate level.

J Martin stated his concern at having CPAP at the Basic or Intermediate level. He felt that at this level providers might not have the diagnostic abilities to distinguish between patients with CHF and COPD. Yanofsky disagreed, noting that in the ED CPAP is used for COPD patients. Unlike the drugs we are discussing, CPAP has far fewer adverse effects. He would like to see it in the hands of Intermediates and Basics.

McVicar asked that we table the CPAP discussion for now and place it on the January agenda. In the meantime, Schnyder will gather more information, including TEMSIS data on NH use, and what other states are doing.

Item 3. 2007 Protocol Updates

Below is a summary of the protocol changes suggested by the protocol subcommittee together with the board's decisions:

In general:

- Remove IV statement from each individual protocol, as it is already in Routine Patient Care. Change IV wording in Routine Patient Care to read: "An IV for the purposes of these protocols is a saline lock or IV line with 0.9% NaCl (Normal Saline) and an attempt to obtain a blood sample, unless otherwise specified in an individual protocol."
- Standardize IV fluids throughout the document to read "0.9% NaCl (normal saline)"
- Remove "Consider ALS or paramedic intercept" and oxygen administration, because this too is in Routine Patient Care
- Change "mcg" to "micrograms" throughout the document

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Asthma/COPD/RAD:

- Add levalbuterol (Xopenex®) to the list of approved MDI
- Change MDI assist from 2 puffs every 5 minutes as needed to a total of 3 times.*
- Reformatting
- Move DuoNeb® (albuterol/ipratropium fixed dosage mix) to Intermediate and move straight albuterol to Paramedic
- Add to the end of paramedic protocol: levalbuterol every 20 minutes up to a total of 3 doses.
- Pediatric: similar changes with appropriate dosing
- Pediatric: standardize the basic bullets with the adult protocol

* Reference: National Heart Lung and Blood Inst, NIH Publication No. 07-4051

Comments or Discussion: McVicar questioned whether the intermediates would have both albuterol and DuoNeb®. The intention was just DuoNeb®. Additionally, McVicar questioned if DuoNeb® was in the National Scope of Practice at the Intermediate level. It is not.

Yanofsky and J Martin pointed out evidence-based benefit as cited in the National Heart Lung and Blood Institute's document and felt the Intermediates should be giving DuoNeb®.

Decision: The board agreed to change the Intermediate medication regime from albuterol to DuoNeb® for the Asthma/COPD/RAD – Adult protocol. Also approved the additional changes as noted above. (Unanimous)

Behavioral:

- Will add JCAHO's language pertaining to using the minimum necessary restraint
- Change Haloperidol route per FDA recommendation to IM only
- Diphenhydramine dose change to a range of 25 – 50 mg IV or 50 mg IM

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Diabetic:

- Change title to “Hypoglycemia and Hyperglycemia”
- Add definition of hyperglycemia as glucose levels > 300 mg/dl with associated altered mental status
- Improve wording and formatting
- In compliance with the National EMS Scope of Practice Model, change the Intermediate assist with glucagon to “If unable to obtain IV access in a hypoglycemic patient, administer glucagon 1 mg IM or SQ.”
- For hyperglycemia: administer 500 ml bolus 0.9% NaCl (normal saline), then 250 ml per hour,
- Pediatric: changed dosing to “If glucose level less than 60 mg/dl: administer dextrose per length-based resuscitation tape.”
- Pediatric hyperglycemia: 10 ml/kg bolus in addition to maintaining hemodynamic status

Comments or Discussion: The board agreed thiamine could be removed from the protocol due to lack of evidence for benefit in the prehospital setting. Additionally, the pediatric fluid bolus should be 20 ml/kg.

Decision: Remove thiamine from the protocol and change the pediatric fluid bolus to 20 ml/kg (Unanimous)

Stroke:

- Cincinnati vs Los Angeles stroke scale. Decision left to Board.
- Wording improvements

Comments or Discussion: There was a detailed discussion as to which stroke scale to use. Some liked the LA scale as it was more comprehensive, but others favored the Cincinnati scale for its simplicity and commonality among hospital personnel.

Decision: Keep the Cincinnati scale. Place in a box. Update the protocol with something for postictal state. (Unanimous)

Hyperthermia:

- Formatting changes
- Bullet for a link to Seizure protocol

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Hypothermia:

- Reformat.
- Update the Basic section to reflect AHA CPR guidelines
- Improve wording

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Obstetrical Emergencies:

- Merge the Basic and Intermediate.
- Under Basic/Intermediate
    - Improve formatting and wording
    - Update the Contact Medical control list to include
        - Limb presentation
        - Nuchal cord
- Under Paramedic
    - Change oxytocin dose to 20 units in 1000 ml 0.9% NaCl (normal saline) to control post partum hemorrhage at a rate of 200 – 600 ml/hr.
    - Add bullet: Tocolysis for preterm labor: 0.9% NaCl (normal saline) IV bolus 20 ml/kg prn
        - Contraindications: Gestation beyond 37 weeks, pre-eclampsia, vaginal bleeding

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Pain Management:

- Remove abdominal pain references as previously decided
- Under Intermediate
    - Change the title to read Intermediate Adult Standing Orders
    - In accordance with the National EMS Scope of Practice Model move the paramedic Nitronox® bullet up to the Intermediate level
- Under Paramedic
    - First bullet: add this statement, "for pain control you can use one of the following:"
    - Placed an "OR" at the end of the ketorolac, morphine and fentanyl bullets
    - Add 2.5 – 5 mg IV diazepam for back spasms
    - Add the flumazenil statement
    - Update fentanyl bullet to include 1.4 micrograms/kg intranasal administration. (Will need a different concentration) (500 mcg is the maximum amount allow per the NH Board of Pharmacy)
    - Added a caution statement regarding frail or debilitated patients.

Comments or Discussion: There was discussion regarding Nitronox® and OSHA regulation which typically requires gas scavengers for inhaled anesthetic agents. The protocol subcommittee needs to check the OSHA guidelines.

Diazepam for back spasm was discussed at some length, specifically, if it belonged in the pain protocol. McVicar and Fore felt it should not be in the pain protocol and paramedics should not be mixing opiates and benzodiazepines.

Decisions: Approve Nitronox® for the Intermediate, pending assurance that it meets all OSHA requirements. Remove diazepam from the suggested protocol changes.

Fever Adult and Pediatric:

- Under Basic/Intermediate
    - Remove the N95 bullet

    - Change shivering bullet to read, “Avoid inducing shivering”
- Under Paramedic
    - Reformat
    - Add to the adult protocol a bullet that states if acetaminophen has been previously been administered consider ibuprofen (similar to wording in pediatric.)

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Seizures Adult and Pediatric:

- Merge Basic and Intermediate sections. Remove IV and Consider ALS bullets
- Under Basic/Intermediate
    - Add to the end of the vagus nerve stimulator bullet, “assist family member with placement of magnet.”
- Under Paramedic
    - Add bullet instructing the paramedics to place the magnet onto the vagus nerve stimulator if present.
    - Under pediatric change the midazolam intranasal dose to 0.2 mg/kg

Comments or Discussion: None
Decision: Suggested changes approved unanimously.

Nausea/Vomiting Adult and Pediatric:

- Under Intermediate Adult change IV bullet to 0.9% NaCl (normal saline) IV fluid bolus 10 – 20 ml/kg for dehydration
- Under the Paramedic
    - Reformat and improve wording
    - Add promethazine 12.5 mg IM
    - Chang metoclopramide to 5 mg IV or IM
    - Change “May repeat any of the above…” to include vomiting
    - Need to check FDA information on allow rate of administration of antiemetic drugs.

Comments or Discussion: Add dehydration bullet to the hyperthermia protocol and anywhere else it may apply.
Decision: Suggested changes approved unanimously.

Additional Protocol Items:

Midazolam: Intranasal use and protocol inconsistencies:

The protocol subcommittee will be reviewing the entire document for inconsistencies in the dosing of midazolam. Specifically, the concentration available versus the dosing amounts. Additionally, there were questions as to whether midazolam intranasally was an off-label use. D’Aprix will check on this.

The subcommittee will be putting together a list of approved and unapproved abbreviations to be added to the document.

Wilderness and Tactical Protocols still need to be looked at.

Item 4 TEMSIS Report:

TEMSIS report presented by Schnyder – see attached

IV. INCUBATING PROJECTS & SUBCOMMITTEE REPORTS

ACEP: Fore reported the CME Conference was cancelled due to lack of enrollment. They will be scheduling another conference in May in Lebanon.

Coordinating Board: Achilles reported that the Coordinating Board would be setting up a Strategic Planning Session. This would be similar to the successful planning retreat held in September 2000. The basic question to be answered is: Where we are and where do we need to go? More specifically, this session would discuss the Institute of Medicine's Report, how it affects NH EMS, and an EMS agenda for New Hampshire.. Both the MCB and Coordinating Board would be represented. The meeting will be held in the late winter or early spring at the Local Government Center. Date to be announced.

Achilles continued to report that Marta Modigliani, our legal representative, will be attending today's meeting to discuss, what is a patient and what deployments of EMS providers documentation.

Bureau and Division Update: See attached report.
Additionally, Director Mason updated the board on the following changes that have recently occurred at Fire Standards and Training and Emergency Medical Services:

New email addresses: first.last@dos.nh.gov
New physical address: 98 Smokey Bear Boulevard
New voice over IP telephone system, with the following new main number: 603-223-4200 and Prentiss's secretary's direct number: 603-223-4220

Chief Medical Officer Program: Mason reported that Prentiss is in the nation's first Chief Medical Officer certification program, and due to finish up soon. This designation has been developed by the national Center for Public Safety Excellence. It is part of a broad-based movement for professional credentialing in all fields. If successful in clearing the many requirements, Chief Prentiss will be recognized at a ceremony in Denver next August.

Federal Legislation: Louisiana has a bill to include private EMS and rural fire departments in the Fire Act Grant. Mason does not think it will pass, because the lobbyist have lots of opposition. Mason advised that all who wish to support this should send letters of support to their representatives in Washington.

Local Legislation: The Public Safety Line of Duty Death Benefit for Fire and Police went through. We asked for EMS. Legislative services declared this outside the scope of the bill and its funding mechanism

Senator Peter Burling will file a new bill to add EMS. Mason pointed out that the Division cannot officially lobby for or against legislation. We can testify before the legislature, but technically cannot actually lobby. However, members and guests here can lobby. Former Senator David Currier has agreed to assist in this effort.

Intersections Project: No report.

NH Trauma System: New Hampshire Trauma Conference will be held November 28, 2007 at Church Landing, the Inns at Mill Falls, Meredith, NH.

Other Business:

Fore introduced Kevin Drew, RN, Paramedic, the new fulltime EMS Hospital coordinator for Concord Hospital. J Erickson introduced Janet Williamson, Paramedic, the new EMS Hospital Coordinator for Huggins Hospital. Both were welcomed and encouraged to attend our meetings and provide their input.

V. ADJOURNMENT

Motion by Martin, seconded by D'Aprix to adjourn. Approved. Meeting adjourned at 11:55

VI. NEXT MEETING

January 17, 2008 at the NH Fire Academy, Concord, NH.

Respectfully Submitted,

Suzanne M. Prentiss, Bureau Chief, EMS

(Prepared by Vicki Blanchard, ALS Coordinator)